



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 392-10-01

April 1996

Source: ETSI TC-RES

Reference: DE/RES-06001-10-01

ICS: 33.020, 33.060.50

Key words: TETRA, V+D

**Radio Equipment and Systems (RES);
Trans-European Trunked Radio (TETRA);
Voice plus Data (V+D);
Part 10: Supplementary services stage 1;
Part 10-01: Call identification**

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS is a multi-part standard and will consist of the following parts:

- Part 1: "General network design".
- Part 2: "Air Interface (AI)".
- Part 3: "Inter-working", (DE/RES-06001-3).
- Part 4: "Gateways", (DE/RES-06001-4).
- Part 5: "Terminal equipment interface", (DE/RES-06001-5).
- Part 6: "Line connected stations", (DE/RES-06001-6).
- Part 7: "Security".
- Part 8: "Management services", (DE/RES-06001-8).
- Part 9: "Performance objectives", (DE/RES-06001-9).
- Part 10: "Supplementary services stage 1".**
- Part 11: "Supplementary services stage 2", (DE/RES-06001-11).
- Part 12: "Supplementary services stage 3", (DE/RES-06001-12).
- Part 13: "SDL Model of the Air Interface", (DE/RES-06001-13).
- Part 14: "PICS Proforma", (DE/RES-06001-14).
- Part 15: "Inter-working - Extended Operations", (DE/RES-06001-15).
- Part 16: "Gateways for Supplementary Services", (DE/RES-06001-16).

Transposition dates	
Date of adoption of this ETS:	1 March 1996
Date of latest announcement of this ETS (doa):	31 July 1996
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 January 1997
Date of withdrawal of any conflicting National Standard (dow):	31 January 1997

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1 Scope

This European Telecommunication Standard (ETS) is a delta document detailing the deviations of the Trans-European Trunked RADio (TETRA) Calling Line Identification Presentation (CLIP), Calling/Connected Line Identification Restriction (CLIR), Connected Line Identification Presentation (COLP) supplementary services from the ECMA standard stage 1 descriptions, ECMA-148 [1]. The ECMA clauses which fully apply to this ETS are referred to and only the differences of the ECMA clauses are detailed here.

This ETS applies to individual TETRA teleservices and bearer services only, excluding packet mode data services.

2 Normative references

This ETS incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] Standard ECMA-148 (1990): "Identification Supplementary Services in Private Telecommunication Networks - Specification, Functional Model and Information Flows".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this ETS, the following definitions apply:

bearer service: A type of telecommunication service that provides the capability for the transmission of signals between user-network interfaces.

Mobile Station (MS): A physical grouping that contains all of the mobile equipment that is used to obtain TETRA services. By definition, a mobile station contains at least one Mobile Radio Stack (MRS).

Supplementary Service (SS): A supplementary service modifies or supplements a bearer service or a teleservice. A supplementary service cannot be offered to a customer as a stand alone service. It should be offered in combination with a bearer service or a teleservice.

Switching and Management Infrastructure (SwMI): All of the TETRA equipment for a Voice plus Data (V+D) network except for subscriber terminals. The SwMI enables subscriber terminals to communicate with each other via the SwMI.

teleservice: A type of telecommunications service that provides the complete capability, including terminal equipment functions, for communication between users according to agreed protocols.

3.2 Abbreviations

3.2.1 General abbreviations

For the purposes of this ETS, the following general abbreviations apply:

MS	Mobile Station
PICS	Protocol Implementation Conformance Statement
PTN	Private Telephone Network
SS	Supplementary Service

NOTE: The abbreviation SS is only used when referring to a specific supplementary service.

SwMI **Switching and Management Infrastructure**

TETRA	Trans-European Trunked RAdio
V+D	Voice Plus Data

3.2.2 Supplementary service abbreviations

For the purposes of this ETS, the following Supplementary Service abbreviations apply:

CAD	Call Authorized by Dispatcher
CLIP	Calling Line Identification Presentation
CLIR	Calling/Connected Line Identification Restriction
COLP	Connected Line Identification Presentation
DL	Discreet Listening
TPI	Talking Party Identification

4 Delta stage 1 descriptions

4.1 Document ECMA-148 (1990)

ECMA Clause 1 shall apply. All references to Private Telecommunications Networks (PTNs) shall be replaced by "SwMIs".

ECMA Clause 2 shall not apply.

ECMA Clause 3 shall apply.

ECMA Clause 4 shall apply with the following amendments:

TETRA shall not support sub-addressing.

All references to Private Telecommunications Networks (PTNs) shall be replaced by "SwMIs".

4.2 Delta SS CLIP

ECMA Clause 5 shall apply with the following amendments and additions:

Subclause 5.2.2 - the sentence shall be replaced with the following: "This supplementary service is applicable to all individual basic telecommunication service excluding packet mode data.

Subclause 5.4 - the following subclauses shall be added.

5.4.3 Call report

Call identification shall not have any interaction with call report.

5.4.4 Talking party identification

Call identification shall not have any interaction with talking party identification.

5.4.5 Call forwarding unconditional

Unless restriction applies, the identity of the calling party shall be provided to the diverted-to party. In addition, unless restriction applies, the diverting party (parties if the call is diverted more than once), shall receive the identity of the calling party as part of the normal call presentation (if the call is presented prior to the invocation of diversion), and/or as part of any notification to the diverting party that a call has been diverted.

5.4.6 Call forwarding on subscriber busy

As for call forwarding unconditional.

5.4.7 Call forwarding on no reply

As for call forwarding unconditional.

5.4.8 Call forwarding on not reachable

As for call forwarding unconditional.

5.4.9 List search call

Call identification shall not have any interaction with list search call.

5.4.10 Call authorized by dispatcher

Call identification shall not have any interaction with call authorized by dispatcher.

5.4.11 Short number addressing

Call identification shall not have any interaction with short number addressing.

5.4.12 Area selection

Call identification shall not have any interaction with area selection.

5.4.13 Access priority

Call identification shall not have any interaction with access priority.

5.4.14 Priority call

Call identification shall not have any interaction with priority call.

5.4.15 Call waiting

The user shall be presented with the identity of the calling user at the time the call waiting indication is given to the called party, unless restriction applies.

5.4.16 Call hold

Call identification shall not have any interaction with call hold.

5.4.17 Call completion to busy subscriber

Unless restriction applies, the identity of the calling party shall be provided to the called party when the call is eventually offered to that party.

5.4.18 Late entry

Call identification shall not have any interaction with late entry.

5.4.19 Transfer of control

Call identification shall not have any interaction with transfer of control.

5.4.20 Pre-emptive priority call

Call identification shall not have any interaction with pre-emptive priority call.

5.4.21 Include call

Should the user be included in an ongoing call, the identity of the calling party only shall be presented to the user.

5.4.22 Advice of charge

Call identification shall not have any interaction with advice of charge.

5.4.23 Barring of outgoing calls

Call identification shall not have any interaction with barring of outgoing calls.

5.4.24 Barring of incoming calls

Call identification shall not have any interaction with barring of incoming calls.

5.4.25 Discreet listening

The SS Discreet Listening (DL) shall take precedence over SS CLIR and the identity of the calling party shall not be presented to the parties of an ongoing call.

5.4.26 Ambience listening

Call identification shall not have any interaction with ambience listening.

5.4.27 Dynamic group number assignment

Call identification shall not have any interaction with dynamic group number assignment.

5.4.28 Call completion on no reply

Unless restriction applies, the identity of the calling party shall be provided to the called party when the call is eventually offered to that party.

5.4.29 Call retention

Call identification shall not have any interaction with call retention.

Clause 6 shall apply.

Clause 7 shall apply.

4.3 Delta SS COLP

ECMA Clause 8 shall apply with the following amendments and additions.

Subclause 8.2.2 - the sentence shall be replaced with the following: "This supplementary service is applicable to all individual basic telecommunication service excluding packet mode data".

Subclause 8.4 - the following subclauses shall be added.

8.4.3 Call report

Call identification shall not have any interaction with call report.

8.4.4 Talking party identification

Call identification shall not have any interaction with talking party identification.

8.4.5 Call forwarding unconditional

Unless restriction applies, the calling party receives the identity of the final connected party, after all diversions have taken place. Restriction, in this case includes not only connected line identification restriction invoked at the final connected party, but also any restriction imposed by the diverting party on calling party notification that diversion has taken place.

NOTE: Unless restriction applies, the calling party receives the identity of the final connected party, after all diversions have taken place. Restriction, in this case, includes not only connected line identification restriction invoked at the final connected party, but also any restriction imposed by the diverting party on calling party notification that diversion has taken place.

8.4.6 Call forwarding on subscriber busy

As for call forwarding unconditional.

8.4.7 Call forwarding on no reply

As for call forwarding unconditional.

8.4.8 Call forwarding on not reachable

As for call forwarding unconditional.

8.4.9 List search call

Call identification shall not have any interaction with list search call.

8.4.10 Call authorized by dispatcher

Call identification shall not have any interaction with call authorized by dispatcher.

8.4.11 Short number addressing

Call identification shall not have any interaction with short number addressing.

8.4.12 Area selection

Call identification shall not have any interaction with area selection.

8.4.13 Access priority

Call identification shall not have any interaction with access priority.

8.4.14 Priority call

Call identification shall not have any interaction with priority call.

8.4.15 Call waiting

The identity of the connected party shall not be presented to the calling party, until the connected party accepts the call, unless identification restriction applies.

8.4.16 Call hold

Call identification shall not have any interaction with call hold.

8.4.17 Call completion to busy subscriber

Unless restriction applies, the calling party shall receive the identity of the party connected to when the call is eventually set-up.

8.4.18 Late entry

Call identification shall not have any interaction with late entry.

8.4.19 Transfer of control

Call identification shall not have any interaction with transfer of control.

8.4.20 Pre-emptive priority call

Call identification shall not have any interaction with pre-emptive priority call.

8.4.21 Include call

Call identification shall not have any interaction with include call.

8.4.22 Advice of charge

Call identification shall not have any interaction with advice of charge.

8.4.23 Barring of outgoing calls

Call identification shall not have any interaction with barring of outgoing calls.

8.4.24 Barring of incoming calls

Call identification shall not have any interaction with barring of incoming calls.

8.4.25 Discreet listening

Should a discreet listening call be made to an ongoing call, no indication of the discreet listening party shall be given to the parties of the ongoing call. The SS DL takes precedence, even though one/any of the ongoing call users have a service profile which permits the override of connected line identification restriction.

8.4.26 Ambience listening

Call identification shall not have any interaction with ambience listening.

8.4.27 Dynamic group number assignment

Call identification shall not have any interaction with dynamic group number assignment.

8.4.28 Call completion on no reply

Unless restriction applies, the calling party shall receive the identity of the party connected to when the call is eventually set-up.

8.4.29 Call retention

Call identification shall not have any interaction with call retention.

Clause 9 shall apply.

Clause 10 shall apply.

4.4 Delta SS CLIR

Subclause 11 shall apply with the following amendments and additions.

Subclause 11.2.2 - the sentence shall be replaced with the following: "This supplementary service is applicable to all individual basic telecommunication service excluding packet mode data".

Subclause 11.4 - the following subclauses shall be added.

11.4.3 Call report

Call identification shall not have any interaction with call report.

11.4.4 Talking party identification

In the case where SS Talking Party Identification (TPI) has been activated, then SS CLIR shall take precedence. The identity of the party who has activated SS CLIR shall not be given to the other members of the group.

11.4.5 Call forwarding unconditional

When call forwarding occurs, the identity of a calling PTN user who has invoked restriction (automatically or on request from the PTN user) shall not be presented to the diverting party or the diverted-to party, except for the case of a diverting party or diverted-to party with an override service profile.

A diverted-to PTN user who has invoked restriction (automatically or on request from the PTN user) shall not have his identity presented to the calling party, either as SS COLP or as part of a notification of diversion, unless the calling party has an override service profile. A diverted-to party who is provided with SS CLIR temporary mode shall not have his identity revealed to the calling party as part of notification of diversion until the diverted-to party has responded and it is known that restriction is not to be invoked, unless the calling party has an override service profile.

NOTE: The invocation of SS CLIR at the diverting party has no impact on the presentation of the diverting party's number to the calling party or to the diverted-to party. These presentations are governed by options in the various diversion services.

11.4.6 Call forwarding on subscriber busy

As for call forwarding unconditional.

11.4.7 Call forwarding on no reply

As for call forwarding unconditional.

11.4.8 Call forwarding on not reachable

As for call forwarding unconditional.

11.4.9 List search call

Call identification shall not have any interaction with list search call.

11.4.10 Call authorized by dispatcher

When outgoing calls are completed via dispatcher authorization, (i.e. the SS Call Authorized by Dispatcher (CAD) is activated) CLIR shall not be operative and the identity of the user shall be revealed to the dispatcher. However the SS CLIR shall be operative for incoming calls.

11.4.11 Short number addressing

Call identification shall not have any interaction with short number addressing.

11.4.12 Area selection

Call identification shall not have any interaction with area selection.

11.4.13 Access priority

Call identification shall not have any interaction with access priority.

11.4.14 Priority call

Call identification shall not have any interaction with priority call.

11.4.15 Call waiting

Call identification shall not have any interaction with call waiting.

11.4.16 Call hold

Call identification shall not have any interaction with call hold.

11.4.17 Call completion to busy subscriber

Call identification shall not have any interaction with call completion to busy subscriber.

Neither identification shall be given.

11.4.18 Late entry

Call identification shall not have any interaction with late entry.

11.4.19 Transfer of control

Call identification shall not have any interaction with transfer of control.

11.4.20 Pre-emptive priority call

Call identification shall not have any interaction with pre-emptive priority call.

11.4.21 Include call

Call identification shall not have any interaction with include call.

11.4.22 Advice of charge

Call identification shall not have any interaction with advice of charge.

11.4.23 Barring of outgoing calls

Call identification shall not have any interaction with barring of outgoing calls.

11.4.24 Barring of incoming calls

Call identification shall not have any interaction with barring of incoming calls.

11.4.25 Discreet listening

A user who has invoked a discreet listening call shall take precedence over CLIR activated at the called users service profile and the identity of the called user shall be revealed.

11.4.26 Ambience listening

Dispatcher invoked:

Call identification shall not have any interaction with ambience listening.

Should the dispatcher invoke the SS "ambience listening", in order to monitor activity in a terminal of interest, then the dispatcher's number shall not be presented to the listened-to party.

Self invoked:

Should the user invoke the SS "ambience listening" in order that another party may listen to his activity, then his number shall be presented to the called party, even though the SS CLIR may be activated in the users service profile.

11.4.27 Dynamic group number assignment

Call identification shall not have any interaction with dynamic group number assignment.

11.4.28 Call completion on no reply

Call identification shall not have any interaction with call completion on no reply.

Neither identification shall be given.

11.4.29 Call retention

Call identification shall not have any interaction with call retention.

Clause 12 shall apply.

Clause 13 shall apply.

History

Document history			
November 1994	Public Enquiry	PE 73:	1994-11-07 to 1995-03-03
December 1995	Vote	V 94:	1995-12-27 to 1996-02-16
April 1996	First Edition		

Source: ETSI TC-RES

Reference: DE/RES-06001-10-09

ICS: 33.020, 33.060.50

Key words: TETRA, V+D

**Radio Equipment and Systems (RES);
Trans-European Trunked Radio system (TETRA);
Voice plus Data (V+D);
Part 10: Supplementary services stage 1;
Part 10-09: Access priority**

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Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 January 1997
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1 Scope

This European Telecommunication Standard (ETS) defines the stage 1 specifications of the Supplementary Service Access Priority (SS-AP) for the Trans-European Trunked Radio (TETRA). Stage 1 is an overall service description from the users point of view but does not deal with the details of the human interface itself.

This ETS specifies the service description of the supplementary service and the procedures to be expected with successful and unsuccessful outcomes. In addition this ETS specifies the interactions with other TETRA supplementary services and inter-working considerations.

Charging principles are outside the scope of this ETS.

The SS-AP enables a user to have preferential access to the TETRA system in times of radio link congestion.

2 Normative references

This ETS incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] CCITT Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [2] ITU-T Recommendation Z.100 (1993): "Specification and Description Language (SDL)".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this ETS, the following definitions apply:

access control: The prevention of unauthorized use of resources, including the use of a resource in an unauthorized manner.

access priority level: A value allocated to each mobile ITSI or GTSI/call type. It is used at the initial call set-up attempt to determine priority access across the air interface to the control functional entities.

served user: The user making a request for service.

Switching and Management Infrastructure (SwMI): All of the TETRA equipment for a Voice plus Data (V+D) network except for subscriber terminals. The SwMI enables subscriber terminals to communicate with each other via the SwMI.

3.2 Abbreviations

3.2.1 General abbreviations

For the purposes of this ETS, the following general abbreviations apply:

GTSI	Group TETRA Subscriber Identity
ISDN	Integrated Services Digital Network
ITSI	Individual TETRA Subscriber Identity
MS	Mobile Station
SDL	(Functional) Specification and Description Language
SS	Supplementary Service

NOTE: The abbreviation SS is only used when referring to a specific supplementary service.

SwMI	Switching and Management Infrastructure
TETRA	Trans-European Trunked RAdio

3.2.2 Supplementary service abbreviations

For the purposes of this ETS, the following Supplementary Service abbreviations apply:

SS-AL	Ambience Listening
SS-AoC	Advice of Charge
SS-AP	Access Priority
APL	Access Priority Level
SS-AS	Area Selection
SS-BIC	Barring of Incoming Calls
SS-BOC	Barring of Outgoing Calls
SS-CAD	Call Authorized by Dispatcher
SS-CCBS	Call Completion to Busy Subscriber
SS-CCNR	Call Completion on No Reply
SS-CFB	Call Forwarding on Busy
SS-CFNRY	Call Forwarding on No Reply
SS-CFNRC	Call Forwarding on Not Reachable
SS-CFU	Call Forwarding Unconditional
SS-CLIP	Calling Line Identification Presentation
SS-CLIR	Calling/Connected Line Identification Restriction
SS-COLP	Connected Line Identification Presentation
SS-CR	Call Report
SS-CRT	Call Retention
SS-CW	Call Waiting
SS-DGNA	Dynamic Group Number Assignment
SS-DL	Discreet Listening
SS-HOLD	Call Hold
SS-IC	Include Call
SS-LE	Late Entry
SS-LSC	List Search Call
SS-PC	Priority Call
SS-PPC	Pre-emptive Priority Call
SDA	Short data Service
SS-SNA	Short Number Addressing
SS-TC	Transfer of Control
SS-TPI	Talking Party Identification

4 Supplementary Service Access Priority (SS-AP) stage 1 specification

4.1 Description

4.1.1 General description

SS-AP enables the user to gain access to the TETRA system in times of radio link congestion. Preferential treatment shall apply to the uplink access.

The Access Priority Level (APL) range is normally stored in the database within the Mobile Station (MS), and an APL is attached to the Layer 3 messages by the Layer 3 Control Entities when sending uplink messages. The APL should be examined by the Layer 2 Entities when making decisions to send the Layer 3 messages.

The APL range may be changed by the Switching and Management Infrastructure (SwMI) and the level used may be selected within the range by the served user.

The APL may be different depending upon the service required.

The network may store the value of the APL assigned to the Individual TETRA Subscriber Identity (ITSI) and/or Group TETRA Subscriber Identity (GTSI) and/or call types upon provision.

The SwMI should periodically broadcast information relating to those mobiles which have been given permission to make an uplink access attempt. Each mobile operating on the network should be assigned an APL by the network provider. In a typical scenario there may be eight access priority levels, each one in turn giving an enhanced performance in times of radio access congestion.

Under normal circumstances when there is no congestion, all mobiles shall be permitted to make access attempts to the SwMI. If the SwMI wishes to regulate random access attempts the SwMI should broadcast a change of APL. A user wishing to establish a call (or transfer information to the SwMI), under these circumstances, shall firstly compare the broadcast message with his/her own APL. If the user's APL is greater than or equal to the broadcast APL, then he/she shall be able to make an initial call set-up attempt. If the user's APL is less than the broadcast APL then he shall not be able to make an initial call set-up attempt at that time and shall wait until the network changes the APL.

4.1.2 Qualifications on applicability to telecommunication services

This supplementary service shall be applicable to all TETRA circuit mode teleservices, to all TETRA circuit mode bearer services, and to the Short Data Service (SDS).

4.2 Procedures

4.2.1 Provision and withdrawal

Provision and withdrawal of SS-AP shall be by pre-arrangement with the service provider.

SS-AP shall be on a per TETRA number (ITSI/GTSI) basis. For each ITSI/GTSI, the supplementary service may be provided by subscription for every basic service subscribed to at that ITSI/GTSI, or for only some of the basic services subscribed to at that ITSI/GTSI.

4.2.2 Normal procedures

4.2.2.1 Activation, deactivation, definition, registration, interrogation and cancellation

4.2.2.1.1 Activation and deactivation

SS-AP may be activated by the service provider upon provision and deactivated upon withdrawal. When activated the APL shall be stored within the MS and may be stored within the SwMI.

4.2.2.1.2 Definition

An authorized user may define the APL for the served user, (e.g. as a dispatcher operation, or as a result of the invocation of SS-Dynamic Group Number Addressing (SS-DGNA)).

4.2.2.1.3 Registration

The SwMI may support the registration of authorized users who may be allowed to carry out definition of the supplementary service for the served user. The registration process shall include the ITSI jurisdiction of the authorised user.

4.2.2.1.4 Interrogation

The SwMI may provide interrogation, which can be local, remote or both.

If local interrogation is provided, a SwMI shall support interrogation on a per number basis for:

- all TETRA teleservices and bearer services as defined previously; and/or
- a user specified basic service.

The SwMI response to an interrogation request shall provide the following information to the user:

- provided or not provided; and
- APL.

Remote interrogation may be possible by a special authorized user. The remote interrogation request and response shall include the information as specified for local interrogation.

4.2.2.1.5 Cancellation

Cancellation shall not be applicable.

4.2.2.2 Invocation and operation

The supplementary service shall be invoked by the SwMI as a result of the downlink broadcast message. The supplementary service shall remain invoked within each mobile as long as the service is activated within the MS.

In the instance where there is no congestion across the air interface, the served user's call shall be set up in the normal manner.

The SwMI shall periodically broadcast information relating to those mobiles which have been given permission to make an uplink access attempt.

When the uplink radio access resources have become congested, the SwMI may change the broadcasted access level message, depending upon the degree of congestion, or upon a pre-determined user/operator agreement, such as a minimum occupancy level.

A served user wishing to establish a call, normally selects a priority level for the call. The MS selects the corresponding APL and then compares it with the broadcast message. This shall be an automatic procedure carried out by the mobile. If the MS's APL is greater than or equal to the broadcast APL, then the MS shall be able to make an initial call set-up attempt. If the MS's APL is less than the broadcast APL then the MS shall not be able to make an initial call set-up attempt at that time and shall wait until the network changes the APL. An indication may be returned to the served user if access has been denied.

A user who has already established a connection when the broadcast APL changes shall not be affected in this manner.

4.2.3 Exceptional procedures

4.2.3.1 Activation, deactivation, definition, registration, interrogation and cancellation

4.2.3.1.1 Activation and deactivation

Exception procedures shall not apply.

4.2.3.1.2 Definition

An exceptional activation may occur when the authorised user tries to define a higher APL but has not subscribed to it. In such circumstances, the authorised user shall receive a notification that the activation has been disallowed and given the reason.

NOTE: The source of the notification is dependant on the implementation option. It is possible that the notification could be generated from the mobile or from the SwMI, depending upon which entity checks the allowed values.

4.2.3.1.3 Registration

Exceptional procedures for registration shall not apply.

4.2.3.1.4 Interrogation

If the SwMI cannot accept an interrogation request, the interrogating user shall receive a notification that SS-AP interrogation was unsuccessful. Possible causes for rejection can be:

- insufficient information;
- basic service to which relevance is requested, is not subscribed to.

4.2.3.1.5 Cancellation

Exceptional procedures for cancellation shall not apply.

4.2.4.1 Invocation and operation

An exceptional condition may arise when the MS attempts to make an initial call attempt without having the appropriate APL. In such circumstances the SwMI may reject the initial call attempt and the cause shall be returned to the served user.

4.3 Interactions with other supplementary services

Interactions with other TETRA supplementary services are specified in subclauses 4.3.1 to 4.3.30.

4.3.1 Calling Line Identification Presentation (SS-CLIP)

SS-AP shall not have any interaction with SS-CLIP.

4.3.2 Connected Line identification Presentation (SS-COLP)

SS-AP shall not have any interaction with SS-COLP.

4.3.3 Calling/Connected Line Identification Restriction (SS-CLIR)

SS-AP shall not have any interaction with SS-CLIR.

4.3.4 Call Report (SS-CR)

SS-AP shall not have any interaction with SS-CR.

4.3.5 Talking Party Identification (SS-TPI)

SS-AP shall not have any interaction with SS-TPI.

4.3.6 Call Forwarding Unconditional (SS-CFU)

SS-AP shall not have any interaction with SS-CFU.

4.3.7 Call Forwarding on Busy (SS-CFB)

SS-AP shall not have any interaction with SS-CFB.

4.3.8 Call Forwarding on No Reply (SS-CFNRy)

SS-AP shall not have any interaction with SS-CFNRy.

4.3.9 Call Forwarding on Not Reachable (SS-CFNRc)

SS-AP shall not have any interaction with SS-CFNRc.

4.3.10 List Search Call (SS-LSC)

SS-AP shall not have any interaction with SS-LSC.

4.3.11 Call Authorized by Dispatcher (SS-CAD)

SS-AP shall not have any interaction with SS-CAD.

4.3.12 Short Number Addressing (SS-SNA)

SS-AP shall not have any interaction with SS-SNA.

4.3.13 Area Selection (SS-AS)

SS-AP shall not have any interaction with SS-AS.

4.3.14 Access Priority (SS-AP)

Not applicable.

4.3.15 Priority Call (SS-PC)

SS-AP shall not have any interaction with SS-PC.

4.3.16 Call Waiting (SS-CW)

SS-AP shall not have any interaction with SS-CW.

4.3.17 Call Hold (SS-HOLD)

SS-AP shall not have any interaction with SS-HOLD.

4.3.18 Call Completion to Busy Subscriber (SS-CCBS)

SS-AP shall not have any interaction with SS-CCBS.

4.3.19 Late Entry (SS-LE)

SS-AP shall not have any interaction with SS-LE.

4.3.20 Transfer of Control (SS-TC)

SS-AP shall not have any interaction with SS-TC.

4.3.21 Pre-emptive Priority Call (SS-PPC)

SS-AP shall not have any interaction with SS-PPC and the PPC shall continue with the highest APL.

4.3.22 Include Call (SS-IC)

SS-AP shall not have any interaction with SS-IC.

4.3.23 Advice of Charge (SS-AoC)

SS-AP shall not have any interaction with SS-AoC.

4.3.24 Barring of Outgoing Calls (SS-BOC)

SS-AP shall not have any interaction with SS-BOC.

4.3.25 Barring of Incoming Calls (SS-BIC)

SS-AP shall not have any interaction with SS-BIC.

4.3.26 Discreet Listening (SS-DL)

SS-AP shall not have any interaction with SS-DL.

4.3.27 Ambience Listening (SS-AL)

SS-AP shall not have any interaction with SS-AL when it has been invoked by the dispatcher.

SS-AP shall not have any interaction with SS-AL when it has been self invoked.

4.3.28 Dynamic Group Number Assignment (DGNA)

If the served user has dynamically assigned a new group then the APL from the served user shall be downloaded to the members of the new group.

4.3.29 Call Completion on No Reply (SS-CCNR)

SS-AP shall not have any interaction with SS-CCNR.

4.3.30 Call Retention (SS-CRT)

SS-AP shall not have any interaction with SS-CRT.

4.4 Inter-working considerations

When the served user moves to another SwMI, he shall be informed of the existence of, or change to, his APL.

4.5 Overall SDL

Figures 1 and 2 contains the dynamic description of SS-AP using the Specification Description Language (SDL) defined in ITU-T Recommendation Z.100 [2]. The SDL process represents the behaviour of the network in providing SS-AP.

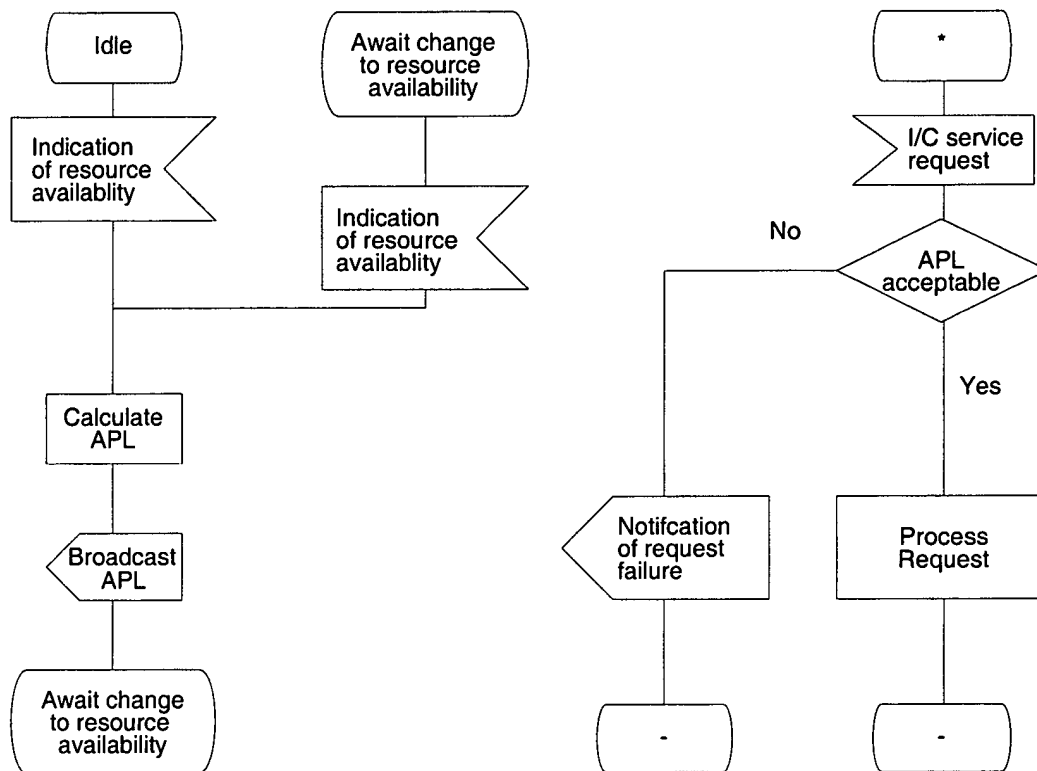


Figure 1: SS-AP supplementary service, overall SwMI SDL

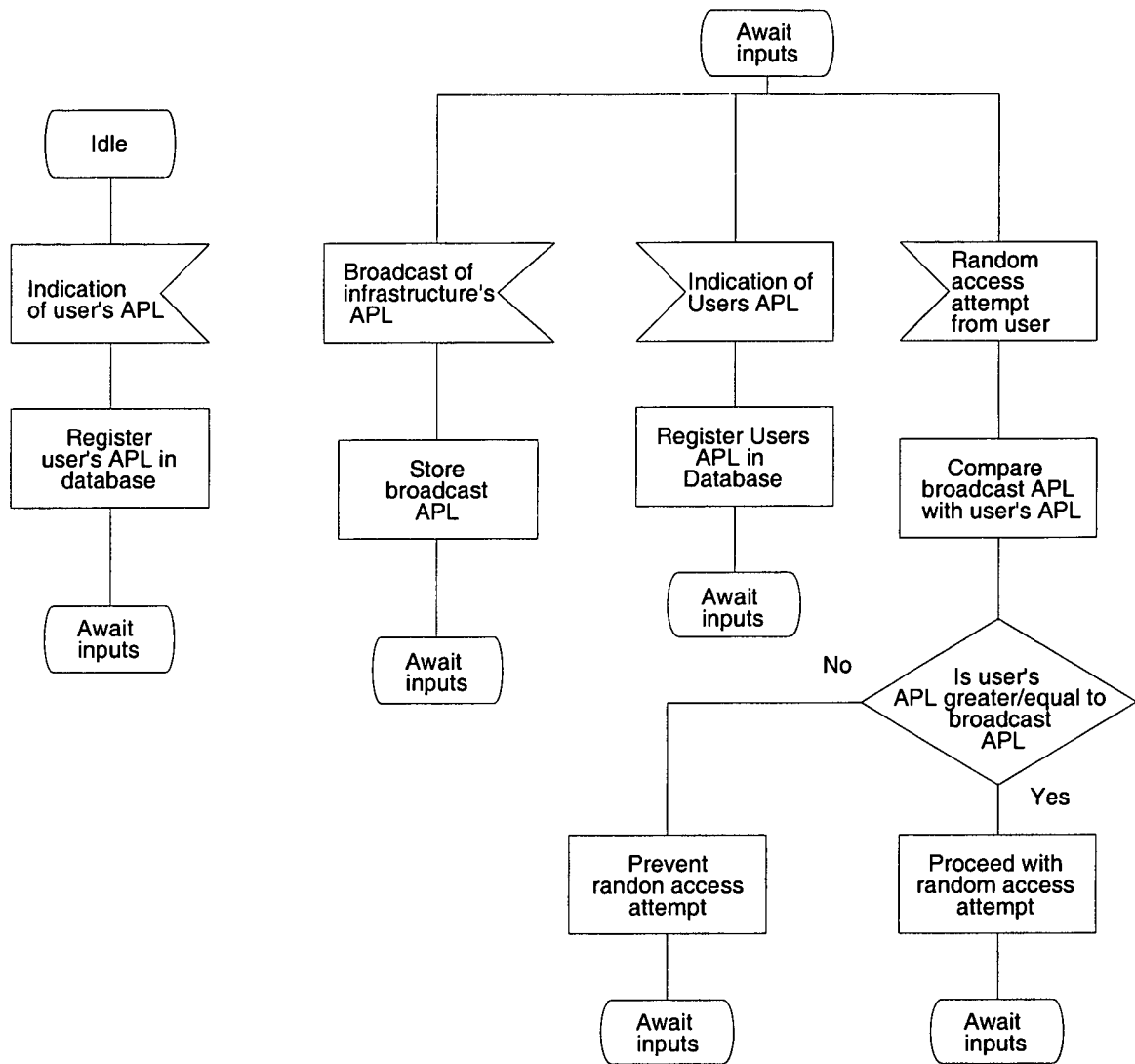


Figure 2: SS-AP supplementary service, overall SDL

History

Document history			
November 1994	Public Enquiry	PE 73:	1994-11-07 to 1995-03-03
December 1995	Vote	V 94:	1995-12-27 to 1996-02-16
April 1996	First Edition		